

Emergency Management/ Homeland Security Higher Education Regional Academic Collaborative Region VIII

After - Action Report/Improvement Plan

August 15, 2018

The After - Action Report/Improvement Plan (AAR/IP) aligns the collaborative engagement objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance.

This report was prepared by:

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ENGAGEMENT OVERVIEW

Engagement Name	Emergency Management/Homeland Security Higher Education Regional Academic Collaborative Region VIII
Exercise Dates	July 6, 2018
Scope	The collaborative engagement was a 1 - day, 4 - hour long event for academics and practitioners from FEMA Region VIII held at Colorado Technical University in Aurora, Colorado. The engagement consisted of presentations sharing examples of successful and forthcoming efforts to move academic and research outputs to emergency management practice followed by open discussion engaging all participants.
Engagement Theme	Practices of collaboration among faculty, researchers, students, and emergency management practitioners within Region VIII.
Purpose	To build awareness and to capture successful regional practices of collaboration with faculty, students, and research working with emergency management practitioners as well as to identify untapped opportunities.
Objectives	<ol style="list-style-type: none">1. To bring together emergency management and homeland security academics and practitioners to share efforts and discuss opportunities.2. To capture the proceedings of the workshop in a shareable document to promote ongoing collaboration.
Sponsor	FEMA Emergency Management Higher Education Program
Participating Organizations	22 participants attended the engagement representing a variety of public and private academic institutions and organizations, Federal agencies, and local utility company and non - governmental organizations. A comprehensive list of participants is available in Appendix A.
Point of Contact	Wendy Walsh, Higher Education Program Manager Wendy.walsh@fema.dhs.gov, 301 - 447 - 1262

EXECUTIVE SUMMARY

On Friday, July 6, a group of practitioners, academics, and intersections of these two circles from FEMA's Region VIII converged in Aurora, Colorado, to discuss collaboration between faculty, students, researchers, and emergency management organizations. The engagement provided opportunity for members of the regional emergency management community to form new relationships, share successful and emerging collaborative practices, and engage in discussion. Sponsored by FEMA's Emergency Management Higher Education Program, the meeting marked the beginning of an effort to hold conferences with a shared purpose and continue the regional cooperation on a more frequent basis.

The engagement commenced with a series of presentations sharing examples of successful and developing efforts to connect academic and research institutions with practitioners. Presenters representing the Federal Emergency Management Agency (FEMA), The Center for Homeland Defense and Security University and Agency Partnership Initiative and Naval Postgraduate School, Colorado Technical University, North Dakota State University, Utah Valley University, Colorado State University, University of Colorado at Colorado Springs, University of South Dakota, Colorado Emergency Preparedness Partnership, Colorado Springs Utilities, The Adapt Institute, North American Aerospace Defense Command (NORAD), and U.S. Northern Command (USNORTHCOM) shared collaborative practices used within their organizations. Methodologies for collaboration between the academic and practical included program development, leveraging entrepreneurial methods to solve problems, structured internships, approaches to acting as a broker between the two groups, and designing academic programs intended to increase the uniformity of the emergency management community.

Following the presentations, the group engaged in a question - and - answer session as well as open discussion. The discourse was centered on processes of creating bridges between the academic and practical spheres and developing well prepared practitioners of emergency management. From the discussion, several themes and recurring opportunities for further collaborations and exploration emerged. Key themes discussed were the increasing complexity of the practitioners' working environment and the ability of academic programs to keep pace, the creation of internships, building and using community networks, the value of practical experience, academic program structure and pedagogy, and the characteristics of knowledge and initial experience necessary for effective practitioners. Additional areas that surfaced in the dialogue highlighted the benefits of ongoing regional collaboration in the design and implementation of internships, forming and maintaining relationships, and academic program design.

ENGAGEMENT PRESENTATIONS

Following self - introductions by the in - person and virtual attendees, the engagement moved into a series of presentations that highlighted academic programs offered by regions' universities and shared collaborative practices within the region. Of the presentations, nine were delivered by on - site attendees while the remainder were delivered by a virtual participant through a webinar software. Key areas addressed by the presenters included the need to tailor academic programs to meet practical needs, prepare future emergency managers for tomorrow's disasters, acknowledge and care for mental health in disasters, form lasting relationships between academically focused institutions and emergency management organizations, further include private sector (to include local businesses) in the emergency management process, and encourage the development of internships in the emergency field.

Alongside in - person and virtual presentations, several resources were provided to attendees. These included handouts on the Natural Hazards Center, the Culture and Disaster Action Network, and the upcoming Region VIII Infrastructure Resilience Conference. For more information, please see corresponding appendices.

Wendy Walsh: Welcome and Introductions

Federal Emergency Management Agency (FEMA) Higher Education Program



Wendy Walsh is the FEMA Higher Education Program Manager from the National Training & Education Division (NTED) and the National Training & Education System (NTES). She previously worked as Homeland Defense and Security Coordinator at the Naval Postgraduate School and as Regional Program Manager - Citizen Corps with the Department of Homeland Security. Her career in homeland security and emergency management education and collaboration spans over a decade, making her an excellent organizer of collaborative efforts in this field.

To set the right tone for the engagement, Ms. Walsh introduced the concept of “gracious spaces” that is closely tied to FEMA’s core values and sets the right environment for collaboration. The key elements of this concept are:

- Spirit of inclusiveness, where all participants are members of one group wanting to collaborate and develop new ideas together rather than function in an “us versus them environment.”
- A welcoming environment is the base for exchange and discussion for all participants whether they are present in the room or attend the collaborative virtually.
- Welcoming of guests and allowing all to share their views, opinions, and values regardless of our own allows for different perspectives that represent all types of communities and embodies the core FEMA value of “serving the whole community.”

- Learning in public highlights the willingness to listen to other participants, ask questions, assimilate new knowledge to expand personal horizons, and allow oneself to grow through such collaborative engagements.

Ms. Walsh then presented the purpose of the meeting which is to build relationships between educational institutions offering degrees in emergency management and related fields in the region and practitioners actively working at local, state, and regional levels. The two parties can then share their expectations and experiences with one another. The last purpose of the engagement is to share successful regional collaborations with faculty, students, and researchers, and identify new opportunities for collaboration and exchange.

Ms. Walsh discussed the National Preparedness System (NPS) and National Training and Education System as part of FEMA's ongoing efforts to improve and learn as an organization and provide learning opportunities to new and seasoned emergency managers alike through collaboration with institutions of higher education.

Nancy Dragani: Welcome and Introductions

FEMA Region VIII Deputy Regional Administrator



Ms. Nancy Dragani serves as Deputy Regional Administrator for FEMA Region VIII. She oversees the operational aspects of regional disaster response, recovery, mitigation, and preparedness activities covering the Region and 28 federally recognized Tribal Nations. Previously she served as Acting Deputy Assistant Administrator for the FEMA Recovery Directorate, where she oversaw daily operations and led efforts to enable states to take a more active role in managing disaster recovery efforts. She also served as the Acting Regional Administrator for FEMA Region VIII. Before her tenure at FEMA, she worked for the Ohio Emergency Management Agency for 20 years as Executive Director from 2005 to 2014. Ms. Dragani also had an accomplished career in the military, where she served for 22 years in the U.S. Army, Ohio Army National Guard, and Air National Guard. She has also served in various capacities on FEMA's National Advisory Council, Memorial Institute for the Prevention of Terrorism Advisory Board, and presided over the National Emergency Management Association from 2008–2009.

Ms. Dragani introduced Region VIII and thanked the participants for attending the Collaborative. She stressed the importance of collaboration and relationship building between Federal, state, and local emergency management agencies and institutions of higher education and the need for greater engagement to better serve the communities, states, and the region as a whole. She also pointed out the wealth of resources available to emergency managers in Region VIII such as the excellent Space Weather Prediction Center outside of Boulder or the University of Utah which provides maps for the western United States alongside one - of - a - kind emergency management programs offered at universities within the region.

Steve Recca: Program and Opportunities Overview

University and Agency Partnership Initiative, NPS Center for Homeland Defense & Security



Mr. Steve Recca directs the [University and Agency Partnership Initiative \(UAPI\)](#) for the Naval Postgraduate School (NPS) Center for Homeland Defense and Security. Mr. Recca's previous positions include security policy assignments with the Central Intelligence Agency, State Department, Department of Defense, and in academia. From 1995–98, he served as Special Assistant and Speechwriter for the Secretary of the Navy and the Director of Central Intelligence. Following assignment to the U.S. Embassy in Oslo, Mr. Recca held the Inman Intelligence Chair at NPS, and returned to Europe in 2003 to serve as the Defense Department's Chief Liaison to the German

Federal Intelligence Service. From 2006 until April 2009, Mr. Recca directed the Center for Homeland Security at the University of Colorado, Colorado Springs, where he managed graduate and undergraduate education programs, applied research, and an international civil security seminar program in partnership with the George C. Marshall European Center for Security Studies. He serves on the Board of Trustees for Marian University and the HS/EM Program Advisory Board for the University of California – Los Angeles. Mr. Recca also is Managing Editor for the *Journal of Human Security and Resilience*, and is on the Review Board for two additional peer - reviewed journals: *Homeland Security Affairs* and *Journal of Homeland Security Education*.

Mr. Recca explained UAPI brings together institutions offering homeland security education. The goal is to increase the number and diversity of students receiving such education while simultaneously improving the quality of homeland security programs. It fosters collaborations and intellectual exchange to further this field of study. All partners engaged in these collaborations provide educational resources and share their expertise with students and educators beyond the Naval Postgraduate School. You can find out more about the school here: www.uapi.us

Dr. Tina Bynum: Program and Opportunities Overview

Colorado Technical University (CTU)



Dr. Tina Bynum is the Security Studies Program Director at [Colorado Technical University](#) in Colorado Springs, Colorado. She has served in this capacity for more than 3 years. She is also an editorial review board member for the *Journal of Homeland Security Education*. She has been active in academic development of homeland security - centered studies for more than a decade and has hands - on experience in emergency management and firefighting.

Dr. Bynum introduced her colleagues, Dr. Lizbeth Jordan and Dr. David Browne, teaching homeland security and criminal justice at Colorado Technical University. The university offers computer and cyber security, homeland security, and emergency management - centered undergraduate and graduate - level courses focused on the community. The school emphasizes problem - based

learning models with its adaptive learning platform, intellipath, which is geared towards students with prior experience. CTU offers credits for work - related experience and prior learning. It also offers internship and volunteer collaborations for students who do not possess significant experience in the field. Though not nationally accredited, CTU's Security Studies program includes several other accreditations that help place students in the workforce. Colorado Technical University works closely with military students in the area. As one of the organizers of this event, Dr. Bynum and CTU provided a good space for this engagement, ensuring all participants, whether in - person or virtual, were comfortable and could participate easily in the exchange of ideas and collaboration. You can find out more about the school here:

<https://www.coloradotech.edu/degrees/studies/security - studies>

Dr. Jessica Jensen: Program and Opportunities Overview

North Dakota State University (NDSU)



Dr. Jessica Jensen is the Head of the Department of Emergency Management and associate professor at [North Dakota State University](https://www.ndsu.edu/). Her academic career grew with the department as she completed her Emergency Management education when it was still aligned with the Anthropology and Sociology department before achieving its own separate department status. Dr. Jensen's research interests include development of emergency management as an academic discipline; synthesis of findings related to hazards, vulnerability, and associated events from other academic disciplines, and integrating the findings into the discipline of emergency management; measuring the effectiveness and efficiency in preparedness for, response to, and recovery from hazard events along with other learning - related aspects of EM.

The school offers a bachelor's degree for students that want to make emergency management their primary career, giving them a solid theoretical foundation along with hands - on experience gained through mandatory internships and professional development courses. It gives students the opportunity to experience emergency management and gain necessary work experience prior to degree completion, allowing for better job placement. It also recruits the best students for Ph.D. programs to further develop a solid theoretical base in the field while building strong relationships with state and local governments. You can find out more about the school here:

https://www.ndsu.edu/emgt/about_us/

Dr. Dave McEntire: Program and Opportunities Overview

Utah Valley University (UVU)



Dr. Dave McEntire is the Dean of The College of Health and Public Service at [Utah Valley University \(UVU\)](https://www.uvu.edu), where he works on growing the Emergency Management component and tying public health and emergency responder programs with emergency management. He received his Ph.D. from the University of Denver, where he focused on studying international disaster relief. Dr. McEntire was previously an associate professor of Emergency Administration and Planning in the Department of Public Administration at the University of North Texas.

The College of Health and Public Service offers a wide a variety of degrees related to emergency management, public safety and response, and health services. It also houses the Center for National Security Studies which provides students with opportunities for studying counterterrorism, homeland security, or international development among others. The breadth of programs offered at the school and variety of national and international collaborations in emergency management and disaster planning such as cooperation with New Zealand in earthquake response planning gives students the opportunity to learn the tricks of their particular trade and how to benefit from other organizations' or countries' experiences. Instructors from UVU offer CERT training internationally, most recently in the Balkan region. You can find out more about the school here: <https://www.uvu.edu/catalog/current/colleges - schools/college - of - health - and - public - service.html>

Dr. Larry Grosse: Program and Opportunities Overview

Colorado State University (CSU)

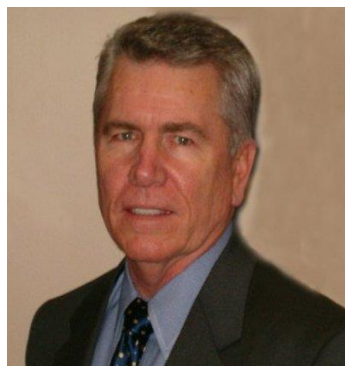


Dr. Grosse began his career in the fire service as an organizer and manager for volunteer fire departments in Texas. His academic interests are closely tied to firefighting—smoke movement and detection in buildings. His research career at Texas A&M helped define the updated smoke detector requirements for residential occupancy. He published books, chapters, and articles related to fire - safe building design and smoke movement.

Dr. Grosse introduced [Colorado State University's \(CSU\)](https://www.online.colostate.edu/degrees/fire - services/) bachelor's degree in Fire and Emergency Management Administration. This degree is a cross - section of management and administration of fire services, and equips students who not only want to fight fires but want to grow their career in fire management. Courses in wildland fire issues are currently being added to the curriculum, addressing the growing concern with such fires and their management in local communities. Personnel, financial, and emergency management are taught along with program evaluation utilizing case studies, collaboration, and peer engagement. CSU wants to integrate fire management into homeland security and emergency management studies to better serve communities in southern Colorado and beyond. You can find out more about the school here: <https://www.online.colostate.edu/degrees/fire - services/>

Andy Cain: Program and Opportunities Overview

University of Colorado at Colorado Springs (UCCS)



Mr. Andy Cain, a retired U.S. Navy captain and active community member, sits on numerous advisory boards and councils throughout Colorado's Front Range. Notably, Mr. Cain acts as chancellor emeritus for [Colorado Technical University's Colorado Springs \(UCCS\)](#) campus, chairs the advisory board for The Home Front Cares and UCCS's Center for Human Security, sits on the board of directors for the American Red Cross of Southeastern Colorado, and remains on the editorial boards of several academic homeland defense journals.

Mr. Cain highlighted Colorado Springs' unique community of integrated law enforcement and emphasized the need to further integrate law enforcement, medical services, and emergency management. Focusing on the UCCS School of Public Affairs, Mr. Cain sees an opportunity to both educate and equip students through certificate - oriented programs. These programs include graduate certificates in Homeland Security and Emergency Management Leadership and an undergraduate certificate in Homeland Security. Mr. Cain continues to encourage educational programs to orient learning around community needs and applicability.

The UCCS School of Public Affairs continues to pride itself on its balance of theory and real - world application. It includes programs in public affairs and criminal justice. It also houses the Center for Human Security, which focuses on a human - centric approach to applied security studies. You can find out more about the school here: <https://www.uccs.edu/spa/>

Randy Quevillon: Program and Opportunities Overview

University of South Dakota (USD)



Dr. Randy Quevillon holds a Ph.D. from the University of Montana with his clinical internship completed at the University of Oklahoma Health Sciences Center. He has been a professor with the [University of South Dakota's \(USD\)](#) Psychology Department since 1978. Dr. Quevillon has been the Department Chair since 1991 and was a founding member of the Disaster Mental Health Institute. Dr. Quevillon's research focuses on stress among disaster victims and helpers, depression, professional training issues, and rural community health.

Presenting virtually and representing USD, Dr. Quevillon's presentation focused on his research interests and USD's development of the Disaster Mental Health Institute. Dating back to the 1989 crash of Flight 232 in Sioux City, USD has had a rich history of meeting the mental health needs associated with disaster response. Evolving from response to research, the university has developed undergraduate to doctoral programs to specifically address disaster mental health. Emphasizing the graduate certificate program in Disaster Mental Health, the academic study includes core courses in crisis intervention, serving the diverse community in disaster, and disaster mental health. Electives range from international disaster psychology to traumatic stress. More information can be found here: <https://www.usd.edu/arts-and-sciences/psychology/dmhi>

Doug Johnston: Volunteer Student Intern Program, DSCA & CBRE Course Expertise NORAD and USNORTHCOM (N&NC)



Mr. Doug Johnston, retired from the U.S. Air Force, is the Chief of the Joint Training and Education (J72) Division for NORAD and [USNORTHCOM \(N&NC\)](#). He leads a joint, bi - national team of 46 to deliver the education and training programs for N&NC staff, Dual Status Commanders, and the State National Guard JTF Staffs. He directs general/flag officer training for the defense against hostile actions directed at the United States and Canada and serves as the Homeland Security/Defense Education Consortium steering committee chairman.

Mr. Johnston presented on N&NC's three - phase approach to academic collaboration and student engagement. Utilizing research and writing topics, N&NC is able to gain valuable research in interest areas while students have the opportunity to engage with Subject Matter Experts (SMEs). Culminating in an opportunity to brief at a joint and combatant command, students submit final products that can then be incorporated into N&NC. Symposiums and university workshops offer another area of interactivity. Exchanging N&NC SMEs and university faculty, N&NC provides guest speakers and even hosts workshops, most notably the annual Joint Training and Education Academic Workshop (JTEAW).

As its third phase, Mr. Johnston highlighted N&NC's flagship Volunteer Student Intern Program. Offering positions across the command that touch all N&NC mission sets, the program seeks to provide applicable and meaningful opportunities to graduate students and ROTC cadets. A 9 - week commitment, the program has openings in both January and June. To find out more about the program, click here:

http://www.northcom.mil/USNORTHCOM/ACADEMIC_ALLIANCE/VSIP/

Mr. Johnston concluded with N&NC's desire to enhance education opportunities with emergency management, specifically with CBRN Response Enterprise capabilities. Currently developing courseware for the ICS Center for Domestic Preparedness, N&NC hopes to collaborate with EMI to make courseware available to more users.

Steven Kuhr: Interconnected Critical Infrastructure and Implications for Emergency Management Higher Education

Colorado Springs Utilities (CSU) Emergency Management & Continuity



Mr. Steven Kuhr is the Manager of Emergency Management and Continuity at Colorado Springs Utilities (CSU). Mr. Kuhr leads a team which oversees a comprehensive crisis management program. CSU incorporates the practices of emergency management, homeland security, and business continuity for the four utility services – Electric, Natural Gas, Water, and Wastewater Services – for Colorado Springs and other communities in the Pikes Peak region. Mr. Kuhr holds a Bachelor of Science in Emergency Management Administration and a

Master of Science in Homeland Security Management.

Mr. Kuhr approaches disaster response by looking at the impact of how emergencies involving critical infrastructure affect the community. With 16 interconnected and interdependent critical infrastructure sectors deemed critical infrastructure, Mr. Kuhr asserted that the nature of the American way of life depends on the uninterrupted provision of reliable electricity and safe drinking water. Emphasizing the overarching and devastating effects impaired infrastructure can have on the post - disaster community recovery process, Mr. Kuhr is passionate about developing emergency managers prepared to attain positions in critical infrastructure organizations.

Colorado Springs Utilities (CSU) offers both Federal Work Study and internships to students. Seeing a lack of critical infrastructure planning in both Emergency Management and Homeland Security, Mr. Kuhr seeks to push emergency management education and training to consider critical infrastructure. Encouraging the development and/or addition of cyber security, physical security, and operational continuity is one of the ways Mr. Kuhr believes education can further equip future emergency managers. The class noted in this presentation a need to incorporate academia and strengthen private partnerships to better prepare the next generation of emergency management.

Alex Porter: Frederick S. Pardee Center for International Futures

University of Denver (DU)



Mr. Alex Porter is a research consultant at the Frederick S. Pardee Center for International Futures. Mr. Porter holds a Master of Arts from the University of Denver's Josef Korbel School of International Studies. He has utilized modeling to explore education quality, labor dynamics, migration, and violence in Central America, assessed the forecastability of transnational organized crime, and coordinated with USAID country missions and the Latin America Office of Regional Sustainable Development.

Mr. Porter presented on the University of Denver's Frederick S. Pardee Center for International Futures. The Center for International Futures acts as a long - term integrated forecasting and modeling system that is used to frame the future and help the international community prepare programs that can actually impact key issues. A non - profit consulting wing of the Korbel School (at DU), the Center for International Futures hopes to bridge the gap between academia and the government.

Though originally geared toward the global community and published for its work on health policy, the core of its model is human services, natural models, and governing models which Mr. Porter believes would be beneficial to emergency management. Providing a "30,000 - foot view" of how the world is going to change and how we'll need to adapt to it, the Center for International Futures is moving towards environmental modeling. Learning what the natural disasters of the future could be, states Mr. Porter, could help emergency managers today prepare for the disasters of tomorrow.

Gregory Vigneaux: Next Generation Core Competencies – A framework for bridging practice & education

The Adapt Institute



Mr. Gregory Vigneaux began his career as a wildland firefighter for the National Park Service and United States Forest Service Hotshot Crews. In the fall of 2016, Mr. Vigneaux completed a Master of Science in Emergency Services Administration at California State University, Long Beach, and began teaching within the program. Since graduating, Mr. Vigneaux has been fortunate to move from practicing to guide practice as an educator and consultant. Insights from Mr. Vigneaux's research have informed his work on global policy implementation, program development, graduate course design and delivery, and a number of consulting engagements.

Mr. Vigneaux introduced the Adapt Institute, which helps educational programs and organizations develop the next generation of emergency management and emergency services and professionals through leveraging the Core Competencies Framework. The Core Competencies include 3 interrelated groups with 13 Core Competencies. These groups include behavioral, technical, and relational. These competencies support a collaborative approach to developing an emergency management workforce ready to face the challenges of 2030 and beyond.

The Core Competencies Framework creates a new opportunity to collaborate and circulate lessons learned from the community. It includes a shared, adaptable framework that supports co-learning evaluation, information sharing, and knowledge management. Mr. Vigneaux desires for the emergency management community to consider how we can move Core Competencies into practice and examine what needs to be created to further integrate these into universities and existing emergency services. The class brainstormed how FEMA might be able to apply Core Competencies to the National Qualification System and existing mission areas and core capabilities. To find out more about the [Adapt Institute and Core Competencies](https://www.adapt.institute/), click here: <https://www.adapt.institute/>

ENGAGEMENT DISCUSSION

The original agenda called for small group breakout discussions followed by a facilitated conversation with the entire group. However, due to time constraints, there were no breakout discussions. Instead, all participants in the meeting, both in person and virtual, engaged in brief discussion after each presenter finished and in a dialogue with the larger group. Allowing questions at the conclusion of each presentation helped identify key interest areas to the group and where greater collaboration was both needed and wanted. Presentation questions also provided a venue for participants to share expertise and resources relating to interest areas. The large group discussion assisted in establishing areas of commonality and was most beneficial for fostering relationships within the group.

From these discussions, three key themes emerged: (1) building a culture of preparedness, (2) equipping the next generation of emergency management, and (3) emphasizing and understanding recovery.

The first theme that emerged from engagement discussions was the continual need to **build a culture of preparedness** that extends from the classroom to the community. While defined by FEMA as a state in which survivors know what actions to take during and after a disaster as FEMA exhibits catastrophic readiness while simultaneously empowering state, local, and tribal governments to manage disasters, participants defined a culture of preparedness by the capacity of emergency managers and their respective communities to address the next disaster. Current gaps in preparedness include incorporating public health and critical infrastructure in planning. Participants noted the need for community capacity planning and increased understanding of the cascading effects of crippled critical infrastructure. The group also noted key stakeholders and partners missing from the conversation, specifically tribal leadership. Overall emphasis was placed on preparing current and future emergency managers for the disasters of tomorrow.

Not only did group discussion reiterate concepts of preparedness, but various presentations shared the theme. Mr. Kuhr (CSU) pushed the public dependency on critical infrastructure. To continue providing reliable electricity, safe drinking water, etc., in a disaster, the emergency management community must advocate for greater cyber and physical security within the private sector. The Pardee Center for International Futures has the potential to partner with the emergency management community to better predict future disasters and help communities more accurately plan for incidents. And the CEPP presents a model for helping states identify gaps in integrated planning and create solutions to raise the state's level of preparedness.

In terms of ideas for **equipping the next generation of emergency managers**, Mr. Cain asked the practitioners what changes need to be implemented at universities to better educate future emergency managers. Several practitioners mentioned the need to bring the curriculum closer to real - world practices and provide better internship opportunities for students, especially those pursuing bachelor - level education and lacking professional experience. Another issue mentioned by several participants was the lack of courses on recovery, its long - term implications for communities, and building resilient communities. The financial aspects of emergency management and understanding its extended impact on community budgets recovering from disasters were mentioned by Ms. Dragani. Future emergency managers must understand how their work is financed and how large - scale disasters can cripple not only local,

but also state budgets and put severe strain on Federal resources. Financial management should be part of emergency management curricula.

Mr. Kuhr stressed the importance of learning practical skills while still attending educational institutions. He expects that students entering the workforce know how to write plans, design and conduct training exercises, or conduct damage assessments. This ties into the need for better understanding of the financial side of disaster response and recovery, as stressed by Ms. Dragani.

Mr. Vigneaux from the Adapt Institute stressed the importance of competencies centered on education and training. He stressed that future emergency managers must learn from current practitioners of the trade to be well equipped to manage disasters when they enter the workforce. The competencies should be part of teaching curricula as well as hands - on training conducted through internships and other practical engagements while still attending school. Practitioners must be able to express what they need from future managers, be willing to share their knowledge, and let less experienced team members be part of the decision making process.

Finally, the third theme that came from discussion was **emphasizing and understanding recovery**. Participants voiced the overarching theme in emergency management to push preparedness and readiness over recovery. Focusing energy to prevention and mitigation or response, recovery is typically overlooked and under - planned. Group discussion called out the long - term (over years) recovery efforts that are eclipsed by the short - term (at most, months) response. The group identified a need to educate key stakeholders on the nature of recovery and encouraged the development of planning models for recovery.

Following Ms. Stubbs' presentation on disaster mental health, the group spent considerable time discussing the existing emergency management culture that overlooks the effects of recovery on the community and emergency professionals. Overall, discussion noted current doctrine and programmatic focus at the Federal level pays homage to recovery but has yet to provide adequate training resources needed to support more widespread capacity to understand and partner with recovery efforts. While resources are provided to first responders and others assisting with response, those focusing on recovery are often underserved. The attitude of "can't stand the heat, get out of the kitchen" permeates recovery efforts. Burnout and emotional trauma for both survivors and those assisting in recovery in the months and years after a disaster are typically unaddressed. The group advocated for an increase in resources and education on the topic as well as stressing the need to separate recovery and response. Existing resources were shared by attendees. These include: (1) Red Cross supervisor training and toolkit, (2) community - based psychological first - aid, and (3) literature references on secondary traumatization and compassion fatigue.

MOVING FORWARD

From the individual presentations and the group discussion that followed, two themes emerged in terms of moving forward: (1) continuing the collaboration within Region VIII, possibly under FEMA leadership, and (2) inviting a broader range of stakeholders to the discussion while continuing to reassess who should be at the table.

In terms of *continuing the collaboration within Region VIII*, participants in the meeting agreed that there is value in coming together, engaging in meaningful dialogue, and sharing best practices while pointing out areas of improvement to strengthen the field of emergency management. Some participants supported the notion that such collaborations would be more successful and more likely to be attended by greater numbers of stakeholders if these were organized and/or endorsed by FEMA Region VIII. While other organizations such as universities or local government may be able to logistically organize meetings and engagements, lack of endorsement from a larger emergency management organization may curb the interest of stakeholders that need to be present.

This ties into the need to *expand the range of stakeholders represented* at the Collaborative. Several participants noted that many parties involved in emergency management and EM education were not present. There were no tribal representatives present, neither from tribal emergency management nor from tribal schools that could and should be engaged in emergency management education. Another group absent from the meeting was representatives from private sector - local businesses that are not only affected by disasters, but also contribute to response and recovery of communities; NGOs such as the American Red Cross, who are directly involved in disaster response; or local and state government agencies who work together and with FEMA while responding to and recovering from disasters.

SUCCESSES AND AREAS FOR IMPROVEMENT

Planning, Logistics, and Technology

Strengths: The event was well attended. Invitations were sent out electronically and collected through EventBrite, including the participant's name, institution, if he/she was attending in person or virtually, and email address. The technology used by virtual participants worked well and all could hear each other. Colorado Technical University provided the academic collaboration with ample space for in - person attendees and assured a comfortable atmosphere by providing snacks, drinks, and lunch. CTU conducted a test run of all technology prior to the beginning of the event to ensure everything would function smoothly.

Area for Improvement: More advanced scheduling and advertisement of event to a wider variety of potential participants for greater participation and representation from the region.

Action: Participants showed enthusiasm for the event and expressed that they knew of more participants (colleagues, peers, etc.) who would have been interested in attending but could not because of the shorter notice. Travel was an acknowledged struggle due to the limited notice, which may have discouraged greater representation from some states within the region. Participants noted that another means to engage representation from the region would be to advertise and highlight the virtual attendance option. Planning future meetings with more advanced notice and advertising the virtual option could allow greater participation, especially from states not represented at this event.

Area for Improvement: Extend length of event.

Action: Participants were eager to discuss and share concerns and ideas. To allow for small group discussion and more in - depth quorum discussion, start the Collaborative earlier and allow it to be longer. The participants did not show fatigue with the discussion and were well engaged when the allotted time passed. Allowing more time could give the participants the opportunity to build stronger relationships, brainstorm more, and create even more action items.

Meeting Content

Strengths: One of the key areas highlighted in presentations was educational programs available in the region and organizations working within academia to prepare future emergency managers for future disasters. Discussions brought to the forefront the need for improving student internship access and ability to gain hands - on experience while completing their education. Participants were enthusiastic and engaged as they discussed a need to continue these collaborative meetings and engage with the entire region to help shape education. The event also highlighted information sharing and was resource heavy (see appendices).

Area for Improvement: Diversity in participants and presenters.

Action: This event included numerous participants from both the private sector and public sector, but to create an even better understanding of the needs of Region VIII, future events could look to include participants and presentations from the non - profit sector (Red Cross,

Samaritan's Purse, food kitchens, homeless shelters, local churches, etc.). Other private sector partners (i.e., Walmart, banks, etc.) could be invited to give insight into their roles in disaster response and recovery. Participants also noted a need to include and engage tribal representatives and gain insight to how they address emergency management in their communities.

Including students from universities in the region pursuing degrees in emergency management and homeland security could also further discussions on core curriculum and skill development. It could also provide a unique opportunity for students to learn the needs of the existing emergency management community and establish more internship placements.

Facilitation

Strengths: The event heavily emphasized communication and collaboration, which were mirrored in the facilitation. Rather than over - structuring conversation, facilitation was primarily used to keep presentations on track and encourage group discussion. Facilitators noted when changes in schedule and greater flexibility were needed and appropriately extended or shortened discussions to fit. Overall, this laissez - faire approach encouraged free - flowing conversation between participants and allowed them to shape the event.

Area for improvement: Include small group discussions or proctor large group discussions.

Action: Participants lingered following the event to connect with other attendees on key topics. While relationship building and connections are at the core of this event, these may have been topics that the whole group would have benefitted from hearing. Small group discussion may have allowed these topics to be introduced during the event. However, time constraints did not allow for breakout groups and the larger group discussion was limited to one or two specific topics, namely education and preparing the next generation of emergency managers. If small group discussions cannot be held due to time constraints, facilitators may need to take on a stronger role to ensure all voices are heard and to cover more topics.

Area for improvement: Identify action items and follow - up steps at the end of the event.

Action: Participants were engaged and interested in creating solutions and continuing conversations. Many stayed after the conclusion of the event to discuss follow - up engagement opportunities and have continued developing relationships. However, because this took place largely towards the end of the event or following its conclusion, there was limited visibility on the action items and follow - up steps for the larger group. The facilitator may need to conclude group discussion earlier and help the team identify its top action items and the follow - up steps it would like to take. Displaying these on a whiteboard or large Post - It Note may help focus participants and encourage even more action items and stakeholder buy - in.

APPENDIX A: ENGAGEMENT PARTICIPANTS

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APPENDIX B: ENGAGEMENT BROCHURE

Emergency Management/Homeland Security Higher Education Regional Academic Collaborative Region VIII

Friday, July 6, 2018 - 10:00 a.m. - 2:30 p.m.

Colorado Technical University - Room 422

3151 South Vaughn Way, Aurora, CO 80014

Virtual Participant Information will be provided prior to the event

Purpose: To build awareness and to capture successful regional practices of collaboration with faculty, students, and researchers working with emergency management practitioners as well as to identify untapped opportunities.

Desired outcome: To support regional community connection and collaboration as well as create a dynamic regional - specific guidebook to identify academic and broader community resources, capabilities, and expertise to support on - going regional academic and practitioner partnership.

Agenda:

10:00 - 10:30 Welcome & Introductions

FEMA Region VIII Deputy Regional Administrator - Nancy Dragani

FEMA Higher Education Program - Wendy Walsh

10:30 - 12:00 - Quick overview of FEMA Higher Education & UAPI programs & successful regional practices to be briefed in 5 - 7 minutes with a couple minutes for questions:

- FEMA/NTED/NTES Higher Education Program - *Collaboration Opportunities*
- FEMA/ NPS/CHDS UAPI Program & Opportunities Overview - Steve Recca
- Colorado Technical University - Program & Opportunities Overview – Dr. Tina Bynum
- North Dakota State University - Program & Opportunities Overview – Dr. Jessica Jensen
- Utah Valley University - Program & Opportunities Overview - Dr. Dave McEntire
- Colorado State University - Program & Opportunities Overview - Dr. Larry Grosse
- University of Colorado at Colorado Springs - Program & Opportunities Overview - Andy Cain
- University of South Dakota - Program & Opportunities Overview - Randy Quevillon
- ORAD/NORTHCOM - Volunteer Student Intern Program, DSCA & CBRNE Course Expertise - Doug Johnston
- Colorado Emergency Preparedness Partnership - Role of Public Private Partnerships - Steve Recca
- Colorado Spring Utilities Emergency Management & Continuity - Interconnected critical infrastructure & implications for emergency management higher education - Steven Kuhr
- Frederick S. Pardee Center for International Futures - Program and Opportunities Overview - Alex Porter
- The Adapt Institute - Next Generation Core Competencies: A framework for bridging practice and education - Greg Vigneaux

12:00 - 1:00 - Working lunch: Small group dialogues to develop idea pathways to practice

- Discuss presentations and other successful practices that could be shared and expanded
- Who are the missing critical stakeholders in the region?
- Who cares about academic and practitioner collaboration?
- Are there challenges that these groups face?
- What is possible in this collaboration?

1:00 - 1:45 - Small group sharing with the whole group

1:45 - 2:30 - Next steps, wrap - up & gratitude



*image from-<http://www.bethkanter.org>



<http://citl.illinois.edu/paradigms/design-thinking>

APPENDIX C: NATURAL HAZARDS CENTER

Dr. Lori Peek briefly introduced the [Natural Hazards Center](https://hazards.colorado.edu/) located at the University of Colorado Boulder, which focuses on research on natural hazards in the United States and the Caribbean Region and its applicability in response and post - disaster recovery. To find out more about the Natural Hazards Center, click here: <https://hazards.colorado.edu/>.

The screenshot shows the homepage of the Natural Hazards Center website. The header includes the logo, navigation links (ABOUT US, PUBLICATIONS, LIBRARY, WORKSHOP, RESEARCH, RESOURCES), and a search bar. The main content area features a large article titled "In it Together?" with a photo of a damaged building and a summary of research on community recovery. To the right of this article is a "Director's Corner" section with two entries: "In it Together?" (dated 06/06/2018) and "Intricate and Uneven" (dated 06/19/2018). Below the main article are three columns of featured content: "Research Counts" with three articles on FEMA's Whole Community Approach, disaster knowledge, and disaster mitigation; "Natural Hazards Center News" with three articles on workshop conversations, surge boots, and research mapping; and another "Director's Corner" section with two entries: "Resolutions" (dated February 2, 2018) and "The Other Deficit" (dated December 4, 2017). At the bottom right are social media icons for Twitter, Facebook, and a "Subscribe" button.

APPENDIX D: CULTURE AND DISASTER ACTION NETWORK

Dr. Kate Browne introduced the [Culture and Disaster Action Network](http://cultureanddisaster.org/), CADAN, which brings together a group of researchers who focus on understanding how culture and social factors impact disaster recovery and how the proper understanding of cultural background helps recovery efforts. To find out more about the CADAN, click here: <http://cultureanddisaster.org/>. To view the [US-Based Recovery Brochure](http://cultureanddisaster.org/resources/), click here: <http://cultureanddisaster.org/resources/>

APPENDIX E: REGION VIII INFRASTRUCTURE RESILIENCE CONFERENCE

Mr. André Mouton invited participants to attend the [Region VIII Infrastructure Resilience Conference](https://dem.utah.gov/2018/09/12/conference-recap-region-8-infrastructure-resilience-conference/) that is being hosted in September in Salt Lake City, Utah. This conference will focus on emergency re - entry planning, incident response to cyberattacks, and how to mitigate and manage mass casualty incidents. To view the invitation, click here:
[https://dem.utah.gov/2018/09/12/conference - recap - region - 8 - infrastructure - resilience - conference/](https://dem.utah.gov/2018/09/12/conference-recap-region-8-infrastructure-resilience-conference/).